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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,931	06/26/2003	Graham Mensa-Wilmot	05516.084002	3848

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EXAMINER

PAYER, HWEI SIU CHOU

ART UNIT	PAPER NUMBER
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3724

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/606,931

Applicant(s)

MENZA-WILMOT ET AL.

Examiner

Hwei-Siu C. Payer

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 12-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## Detailed Action

The preliminary amendment filed on 6-26-2003 has been entered.

### Objection to the Specification

The disclosure is objected to because of the following informalities:

- (1) In paragraph [0014], reference letters "L,D,W" are not found in Fig.1
- (2) In paragraph [0018], reference letter "D" is not found in Fig.1
- (3) In paragraph [0019], "Z" and "25" should read --X-- and --26--, respectively.
- (4) In paragraph [0019], reference letter "W" is not found in Fig.1.
- (5) In paragraph [0020], "25" should read --26--.

Appropriate correction is required.

### Claims Objection

Claims 1-4 and 12-14 are objected to because of the following informalities:

(1) Claim 1 should be labeled as --1.-- rather than "[c1]". Claims 2-4 and 12-14 should be amended accordingly.

(2) Claims 13 and 14 depend from a canceled claim (i.e. claim 5). For examining purpose, claims 13 and 14 have been treated as being dependent from claim 12.

Appropriate correction is required.

**Claims Rejection - 35 U.S.C. 112, second paragraph**

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-4 and 12-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(1) In claim 1, lines 2-11 are vague because it is not understood what method step of forming a drill bit body is defined by the claim language of "the mold having therein at least one displacement adapted to from a mounting pad for a cutting element, the displacement comprising a substantially cylindrical body having a diameter selected to substantially conform to a radius of the cutting element and a projection adapted to from a relief groove under a position of a diamond table in the cutting element when the cutting element is mounted on the pad, a width of the relief groove selected so that the relief groove extends back from an outer surface of the bit body at least about 40 percent of that portion of a thickness of the diamond table which does not extend past the outer surface".

(2) Claims 2-4 are vague since it is not clear exactly what method steps of forming a drill bit body are being claimed therein.

(3) In claim 12, lines 2-9 are vague because it is not understood what method step of forming a drill bit body is defined by the claim language of "the mold having therein at least one displacement adapted to from a mounting pad for a cutting element,

the displacement being made from a single component comprising a substantially cylindrical body having a diameter selected to substantially conform to a radius of the cutting element and a projection adapted to from a relief groove under a position of a diamond table in the cutting element when the cutting element is mounted on the pad".

(4) Claims 13 and 14 are vague since it is not clear exactly what method steps of forming a drill bit body are being claimed therein.

#### **Claims Rejection - 35 U.S.C. 102(b)**

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Newton, Jr. et al. (U.S. Patent No. 4,844,185).

Newton, Jr. et al. disclose a method for forming a drill bit body comprising the step of infiltrating powdered tungsten carbide with a binder alloy in a mold (see column 5, lines 44-50) as claimed. The structural limitation "the mold having therein at least one displacement adapted to from a mounting pad for a cutting element, the displacement comprising a substantially cylindrical body having a diameter selected to substantially conform to a radius of the cutting element and a projection adapted to from a relief groove under a position of a diamond table in the cutting element when the

cutting element is mounted on the pad, a width of the relief groove selected so that the relief groove extends back from an outer surface of the bit body at least about 40 percent of that portion of a thickness of the diamond table which does not extend past the outer surface" as cited in claim 1 has been given very little patentable weight, since it has been held that to be entitled to weight in method claims, the recited structure limitations therein must affect the method in a manipulative sense, and not to amount to the mere claiming of a use of a particular structure. *Ex parte Pfeiffer*, 1962 C.D. 408 (1961).

3. Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by Newton, Jr. et al. (U.S. Patent No. 4,844,185).

Newton, Jr. et al. disclose a method for forming a drill bit body comprising the step of infiltrating powdered tungsten carbide with a binder alloy in a mold (see column 5, lines 44-50) as claimed. The structural limitation "the mold having therein at least one displacement adapted to from a mounting pad for a cutting element, the displacement being made from a single component comprising a substantially cylindrical body having a diameter selected to substantially conform to a radius of the cutting element and a projection adapted to from a relief groove under a position of a diamond table in the cutting element when the cutting element is mounted on the pad" as cited in claim 12 has been given very little patentable weight, since it has been held that to be entitled to weight in method claims, the recited structure limitations therein

must affect the method in a manipulative sense, and not to amount to the mere claiming of a use of a particular structure. Ex parte Pfeiffer, 1962 C.D. 408 (1961).

### **Prior Art Citations**

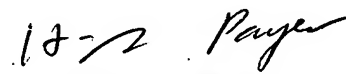
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Radtke, Wardley, I Smith et al. '477 and '013, Griffin, Barr and Fang are cited as art of interest.

### **Point of Contact**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hwei-Siu C. Payer whose telephone number is 571-272-4511. The examiner can normally be reached on Monday through Friday, 7:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 571-272-4514. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for official communications and 571-273-4511 for proposed amendments.

H Payer  
May 11, 2005

  
Hwei-Siu Payer  
Primary Examiner